

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method of managing a data buffer comprising a queue of consecutive segments of data packets in a base station system ~~(+00)~~ of a mobile communications system, comprising the steps of:

- said base station system comparing a size of a data packet segment with a size of a next consecutive data packet segment in said buffer;
- said base station system identifying ~~said a~~ complete data packet in said buffer based on said comparison; and
- said base station system discarding said identified complete data packet from said buffer.

2. (currently amended) The method according to claim 1, wherein said identifying step comprises the steps of:

- identifying said next data packet segment as a first data packet segment of said complete data[[,]] packet in said buffer if said size of said data packet segment is smaller than said size of said next data packet segment; and
- associating said identified first data packet segment with a first segment identifier.

3. (previously presented) The method according to claim 1, wherein said identifying step comprises the steps of:

- identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer if said size of said data packet segment differs from said size of said next data packet segment; and
- associating said identified last data packet segment with a last segment identifier.

4. (currently amended) The method according to claim 2, wherein said discarding step comprises the step of discarding said data[[5]] packet segment associated with said first segment identifier, said data packet segment associated with said last segment identifier, and any intermediate data packet segments between said data packet segment associated with said first segment identifier and said data packet segment associated with said last segment identifier in said buffer.

5. (currently amended) A system for managing a data buffer including a queue of consecutive segments of data packets in a base station system of a mobile communications system, electronic circuitry configured to:

- compare a size of a data packet segment with a size of a next consecutive data packet segment in said buffer;
- identify ~~said a~~ complete data packet based on said comparison; and
- discard said identified complete data packet from said buffer (120).

6. (previously presented) The system according to claim 5, wherein said electronic circuitry is configured to identify said next data packet segment as a first data packet of said complete data packet in said buffer if said size of said data packet segment is smaller than said size of said

next data packet segment, said system further comprises means for associating said identified first data packet segment with a first segment identifier.

7. (currently amended) The system according to claim 5, wherein said electronic circuitry is configured to identify said next data packet segment ~~(P(k+1))~~ as a last data packet segment ~~(P(LAST))~~ of said complete data packet in said buffer ~~(120)~~ if said size ~~(S(k))~~ of said data packet segment ~~(P(k))~~ differs from said size ~~(S(k+1))~~ of said next data packet segment ~~(P(k+1))~~, said system ~~(130)~~ further comprises means ~~(142)~~ for associating said identified last data packet segment ~~(P(LAST))~~ with a last segment identifier ~~(LAST)~~.

8. (currently amended) The system according to claim 6, wherein said electronic circuitry is configured to discard said data packet segment associated with said first segment identifier, said data packet segment associated with said last segment identifier, and any intermediate data packet segments between said data packet segment associated with said first segment identifier and said data packet segment associated with said last segment identifier in said buffer.

9. (currently amended) A base station network node of a base station system ~~(100)~~ in a mobile communications system comprising:

- a data buffer comprising a queue of consecutive segments of data packets; and
- a system for managing said data buffer according to claim 5.

10. (currently amended) A method of enabling identification of a complete data packet in a data buffer comprising a queue of consecutive data packet segments, comprising the steps of:

- comparing a size of a data packet segment with a size of a next consecutive data packet segment in said buffer; and
- identifying ~~said a~~ complete data packet in said buffer based on said comparison.

11. (currently amended) The method according to claim 10, further comprising the step of providing a segment counter (~~k~~) associated with a data packet segment in said buffer.

12. (previously presented) The method according to claim 11, further comprising the steps of:

- comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer;
- identifying said next data packet segment as a first data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter is smaller than said size of said next data packet segment.

13. (currently amended) The method according to claim 11, further comprising the steps of:

- (a) comparing a size of the data packet segment currently associated with said counter with a size of a next consecutive data packet segment in said buffer; and
 - (b) associating said counter with said next data packet segment
- if said size of the data packet segment currently associated with said counter is equal to or larger than said size of said next data packet segment; and
- repeating both said comparison step (a) and said associating step (b) until said size of the data packet currently associated with said counter (~~k~~) is smaller than said size of said next data packet segment, whereby said next data packet segment is identified as a first data packet

segment of said complete data packet in said buffer.

14. (previously presented) The method according to claim 12, further comprising the step of associating said segment counter with said first data packet segment of said complete data packet.

15. (previously presented) The method according to claim 14, further comprising the steps of:

- comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer; and
- identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter differs from said size of said next data packet segment.

16. (previously presented) The method according to claim 15, wherein said complete data packet is identified as comprising said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said buffer.

17. (previously presented) The method according to claim 15, further comprising the steps of:

- determining a total size of said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said

buffer;

- comparing said total size with a minimum size threshold; and
- identifying said complete data packet as comprising said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said buffer if said total size is larger than said minimum size threshold.

18. (previously presented) The method according to claim 11, further comprising the steps of:

- comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer; and
- identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter differs from said size of said next data packet segment.

19. (previously presented) The method according to claim 11, further comprising the steps of:

- (c) comparing a size of the data packet segment currently associated with said counter with a size of a next consecutive data packet segment in said buffer;
- (d) associating said counter with said next data packet segment if said size of the data packet segment currently associated with said counter is equal to said size of said next data packet segment; and
- repeating both said comparison step (c) and said associating step (d) until said size of the data packet segment currently associated with said counter differs from said size of said next data packet segment, whereby said next data packet segment is identified as a last data packet

segment of said complete data packet in said buffer.

20. (previously presented) A system for enabling identification of a complete data packet in a data buffer comprising a queue of consecutive data packet segments, comprising:

- means for comparing a size of a data packet segment with a size of a next consecutive data packet segment in said buffer; and
- means for identifying said complete data packet based on said comparison.

21. (previously presented) The system according to claim 20, comprising means for associating a segment counter with a data packet segment in said buffer.

22. (previously presented) The system according to claim 21, wherein said comparison means is adapted for comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer, wherein said identifying means is adapted for identifying said next data packet segment as a first data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter is smaller than said size of said next data packet segment.

23. (previously presented) The system according to claim 21, wherein said comparison means is adapted for comparing a size of the data packet segment currently associated with said counter with a size of a next consecutive data packet segment in said buffer, wherein said associating means is adapted for associating said counter with said next data packet segment if said size of the data packet segment currently associated with said counter is equal to or larger than said size

of said next data packet segment, said comparison means is adapted for repeating said size comparison and said associating means is adapted for repeating said counter association until said size of the data packet segment currently associated with said counter is smaller than said size of said next data packet segment, whereby said identifying means is adapted for identifying said next data packet segment as a first data packet segment of said complete data packet in said buffer.

24. (previously presented) The system according to claim 22, wherein said associating means is adapted for associating said segment counter with said first data packet segment of said complete data packet.

25. (currently amended) The system according to claim 24, wherein said comparison means is adapted for comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer, wherein said identifying means is adapted for identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter differs from said size of said next data packet segment $(P(k+1))$.

26. (previously presented) The system according to claim 25, wherein said identifying means is adapted for identifying said complete data packet as comprising said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said buffer.

27. (previously presented) The system according to claim 25, further comprising means for determining a total size of said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said buffer, said comparison means is adapted for comparing said total size with a minimum size threshold, and said identifying means is adapted for identifying said complete data packet as comprising said first data packet segment of said complete data packet, said last data packet segment of said complete data packet and any intermediate data packet segments between said first and last data packet segment of said complete data packet in said buffer if said total size is larger than said minimum size threshold.

28. (previously presented) The system according to claim 21, wherein said comparison means is adapted for comparing a size of said data packet segment associated with said counter with a size of a next consecutive data packet segment in said buffer, wherein said identifying means is adapted for identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer if said size of said data packet segment associated with said counter differs from said size of said next data packet segment.

29. (previously presented) The system according to claim 21, wherein said comparison means is adapted for comparing a size of the data packet segment currently associated with said counter with a size of a next consecutive data packet segment in said buffer, wherein said associating means is adapted for associating said counter with said next data packet segment if said size of

the data packet segment currently associated with said counter is equal to said size of said next data packet segment, said comparison means is adapted for repeating said size comparison and said associating means is adapted for repeating said counter associating until said size of the data packet segment currently associated with said counter differs from said size of said next data packet segment, whereby said identifying means is adapted for identifying said next data packet segment as a last data packet segment of said complete data packet in said buffer.